

**Abstract of the Disclosure**

A magnetic recording disk has a ferromagnetic structure of two ferromagnetic layers antiferromagnetically coupled together with an improved antiferromagnetically coupling (AFC) film. The AFC film is an alloy of  $\text{Ru}_{100-x}\text{Fe}_x$  where  $x$  is between approximately 10 and 60 atomic percent. This AFC film increases the exchange coupling by up to a factor of two and has an hcp crystalline structure making it compatible with Co alloy ferromagnetic layers.